ABSTRACT OF THE DISCLOSURE

The seek control means corresponds to a velocity control system which produces a target value based upon a target track, a present position, and a remaining distance from a commencement of a seek operation up to a time instant when a sign of an operating amount is changed; and the seek control means corresponds to a Two Degree of Freedom control system which sets an waveform by a function of time as a target value after the time instant when the sign of the operating amount is changed. The hard disk drives applies a velocity control system based upon a deviation of head positions as to a VCM voltage saturation and a uniform velocity mode, and also, applies a Two Degree of Freedom control system with employment of a function of time having a smooth locus in a decelerated velocity mode so as to suppress residual vibrations.